

Appln. No. 10/821,332

Amendment dated August 24, 2004

Reply to Notice of Omitted Item(s) in a Nonprovisional Application mailed 6/24/2004

Amendments to the Specification:

Please replace paragraph [0017] beginning on page 4, line 17, with the following rewritten paragraph (deleted text being struck through and added text being underlined):

[0017] ~~FIGS. 7A and 7B~~ FIG. 7 schematically ~~show~~ shows a mouse type input ~~devices~~ device according to further embodiments of the present invention.

Please replace paragraph [0034] beginning on page 10, line 5, with the following rewritten paragraph (deleted text being struck through and added text being underlined):

[0034] ~~FIGS. 7 A and 7B show embodiments~~ FIG. 7 shows an embodiment of a pointing device 343 that is believed to have particular applicability in mice or tracking ball type pointing devices. As in a typical mechanical mouse type of device, a ball 345 protruding from an underside of the device 343 turns in the direction of movement. As the ball 345 rotates, it turns rollers 347 and 349 mounted perpendicularly to one another.

Please replace paragraph [0036] beginning on page 10, line 18, with the following rewritten paragraph (deleted text being struck through and added text being underlined):

[0036] Signals corresponding to the rotational direction of the ball 345, i.e., clockwise or counterclockwise, can be transmitted in any suitable manner. For example, signals corresponding to the direction of the turning of the ball 345 can be transmitted in a manner similar to transmission of signals corresponding to the distance of movement of the ball. For example, as seen in FIG. 7A, the signals can be transmitted by arranging antennas 363a, 363b, and 363c of different length on wheels 365 and 367 on the rollers 347

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and 349, respectively. When the ball 345 is moved to turn the toilets 347 and 349, the antennas 363a, 363b, 363c touch contact bars 357 connected to integrated circuits 359 and 361 and signals of different durations corresponding to the different lengths of the antennas are transmitted. The computing arrangement can be arranged to interpret sequences of signals of different durations as movement of the ball 345 in a particular direction. The signals corresponding to the distance of movement of the ball 345 and the signals corresponding to the rotational direction of the ball can be decoded by the computing arrangement and displayed on a display as, for example, movement of a cursor, drawing of a line, etcetera, as in conventional mice or tracking balls.

Please replace paragraph [0037] beginning on page 11, line 10, with the following rewritten paragraph (deleted text being struck through and added text being underlined):

[0037] ~~FIG. 7B shows another~~ Another possible arrangement ~~wherein~~ includes a plurality of antennas 355, which may be the same size, are disposed on wheels 365 and 367. First and second contact bars ~~357a and 357b~~ 357 are connected to respective first and second pairs of integrated circuits ~~359a and 359b and 361a and 361b~~. The order in which the integrated circuit pairs are activated will correspond to the direction of movement of the cursor. The rate at which the pairs are activated indicates rates of movement in a direction of the cursor. The differential rate between pairs indicates the relative rate and direction in each axis.